

**Work Order ID 154508**

Wednesday, December 14, 2016 1:56:26 PM

**\*154508\***

Page 1

Item ID: D3793-1 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Wearplate Fwd  
Start Date: 12/19/2016 Start Qty: 12.00 **\*12\*** Cust Item ID:  
Required Date: 12/23/2016 Req'd Qty: 12.00 **\*12\*** Customer:  
Reference:

Approvals: Process Plan:  Date: 16-12-17 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                                                              | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---------------------------------------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr                                                                          |                      |         |        |              |               |               |                  |                |
| D3793                          | Rev A                                                                                 |                      |         |        |              |               |               |                  |                |
| 100                            | FLOW WATER JET                                                                        | 0.02                 |         |        |              |               |               |                  |                |
| <b>*100*</b>                   |                                                                                       |                      |         |        |              |               |               |                  |                |
| Waterjet                       | Memo                                                                                  | 0.24                 |         |        |              |               |               |                  |                |
| FLOW CNC Waterjet              | 1-Cut as per Dwg D3793 Dwg Rev: <u>A</u> Prog Rev: <u>A</u> 2-<br>Deburr if necessary |                      |         |        |              |               |               |                  |                |
| 110                            | QC2- Inspect parts off machine FAI/FAIB                                               | 0.00                 |         |        |              |               |               |                  |                |
| <b>*110*</b>                   |                                                                                       |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                                                  | 0.02                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                                                       |                      |         |        |              |               |               |                  |                |
| 120                            | QC8- Inspect parts - second check                                                     | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   |                                                                                       |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                                                  | 0.04                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                                                       |                      |         |        |              |               |               |                  |                |

DAS  
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DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                      | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Step #: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | MRB (QSI042) Approval                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Completed By                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Lead hand / Supervisor Approval Verification                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | QC / QA Coordinator Approval                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Environment <input type="checkbox"/><br>Design <input type="checkbox"/><br>Doc/Data <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Pre <input type="checkbox"/><br>Material <input type="checkbox"/><br>Internal Transport <input type="checkbox"/><br>Tribal Knowledge <input type="checkbox"/><br>LOA <input type="checkbox"/><br>Substation <input type="checkbox"/><br>Past Expiry Date <input type="checkbox"/><br>Misidentified <input type="checkbox"/> | No Re-verification <input type="checkbox"/><br>Operator <input type="checkbox"/><br>Offset/Setup <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Training <input type="checkbox"/><br>Use for Testing <input type="checkbox"/><br>Poor Information <input type="checkbox"/><br>Rushing <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Past Due <input type="checkbox"/> | Pressure/Forced <input type="checkbox"/><br>Bending <input type="checkbox"/><br>Centre Not Concentric <input type="checkbox"/><br>Cracks <input type="checkbox"/><br>Crimp/Kink/Ripple/Wave <input type="checkbox"/><br>Cuffs <input type="checkbox"/><br>Crushing <input type="checkbox"/><br>Heat Treat <input type="checkbox"/><br>Wave/Twist in Tube <input type="checkbox"/><br>Marks/Chatter <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Temperature/Cure <input type="checkbox"/><br>Set-up <input type="checkbox"/><br>BOM/Route <input type="checkbox"/><br>Broken/Damage/Defect <input type="checkbox"/><br>Inspection Incomplete/Unqualified <input type="checkbox"/><br>Contamination <input type="checkbox"/><br>Countersink <input type="checkbox"/><br>Cut Too Short <input type="checkbox"/><br>Instructions Incomplete/Unclear <input type="checkbox"/><br>Drill Holes <input type="checkbox"/> | Power Loss/Surge <input type="checkbox"/><br>Folio/Program <input type="checkbox"/><br>Grain <input type="checkbox"/><br>Weld <input type="checkbox"/><br>Wrong Stock Pulled <input type="checkbox"/><br>Out of Sequence <input type="checkbox"/><br>Off-set <input type="checkbox"/><br>Mislabeled <input type="checkbox"/><br>Fit/Function <input type="checkbox"/><br>Misaligned/off center <input type="checkbox"/> | Positioned Wrong <input type="checkbox"/><br>Outside Dimensions <input type="checkbox"/><br>Over/Under tolerance <input type="checkbox"/><br>Part Incorrect <input type="checkbox"/><br>Part Lost/Missing <input type="checkbox"/><br>Part Moved <input type="checkbox"/><br>Drawing <input type="checkbox"/><br>Finish <input type="checkbox"/><br>Misread <input type="checkbox"/><br>Turning Sequence <input type="checkbox"/> |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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| Sequence ID/<br>Work Center ID                      | Operation<br>Description                                                                                                                                   | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code      | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp    |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|--------|-------------------|---------------|---------------|------------------|-------------------|
| 130<br><b>*130*</b><br>Brake NC<br>Brake NC         | NC BRAKE<br><br>Memo<br>1-Deburr if necessary 2-Form on Brake as per Dwg D3793 using Jigs 3-Form<br>Joggle on brake using Jig as per Dwg D3793             | 0.02<br><br>0.04     |         |        | DAS<br>30<br>9-89 | (12)          |               |                  | DEC 19 2016       |
| 140<br><b>*140*</b><br>QC<br>Quality Control        | QC5- Inspect part completeness to step on W/O<br><br>Memo                                                                                                  | 0.00<br><br>0.04     |         |        |                   | (12)          | 161219        |                  | DAS<br>9<br>9-89  |
| 150<br><b>*150*</b><br>Powdercoat<br>Powder Coating | Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3<br><b>17134858.</b><br>Memo<br>START TIME: <u>10:30</u> OVEN TEMPERATURE:<br><u>325</u> FINISH TIME: <u>11:00</u> | 0.00<br><br>0.02     |         |        |                   | 12            | 16-12-21      |                  | DAS<br>34<br>9-89 |



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------------|----------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |  |  |                       |                                              |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Step #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  | MRB (QSI042) Approval |                                              |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                       | Completed By                                 |  |
| <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.3;">             DQA<br/>QC<br/>44           </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                       | Lead hand / Supervisor Approval Verification |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                       | QC / QA Coordinator Approval                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                       |                                              |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                       |                                              |  |
| <div style="display: flex; justify-content: space-between;"> <div>           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div>           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |  | <div style="display: flex; justify-content: space-between;"> <div>           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div>           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div>           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div>           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                       |                                              |  |
| OTHER :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                       |                                              |  |

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|--------------------------------|-----------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160                            | QC3- Inspect Part Finish                            | 0.00                 |         |        |              |               |               |                  |                |
| <b>*160*</b>                   |                                                     |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                | 0.02                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                     |                      |         |        |              |               |               |                  |                |
| 170                            | Identify as per dwg & Stock Location: <u>FP-002</u> | 0.00                 |         |        |              |               |               |                  |                |
| <b>*170*</b>                   |                                                     |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                                | 0.02                 |         |        |              |               |               |                  |                |
| Packaging                      | LOCATION ; FP002                                    |                      |         |        |              |               |               |                  |                |
| 180                            | QC21- Final Inspection - Work Order Release         | 0.00                 |         |        |              |               |               |                  |                |
| <b>*180*</b>                   |                                                     |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                | 0.20                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                     |                      |         |        |              |               |               |                  |                |

DAS  
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DEC 21 2016

DAS  
21  
9-89

DEC 21 2016

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                              |  |
|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|-----------------------|----------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                                                            | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                               |  |                       |                                              |  |
| Date :                                                       |                                                | Step #:                                                                                                                                                                            |                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  | MRB (QSI042) Approval |                                              |  |
| Description Work Order Deviation                             |                                                |                                                                                                                                                                                    |                                                            | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                               |  |                       | Completed By                                 |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       | Lead hand / Supervisor Approval Verification |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       | QC / QA Coordinator Approval                 |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                              |  |
| Root Cause                                                   |                                                | FAULT CATEGORY                                                                                                                                                                     |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                              |  |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>                                                                                                                                           | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Positioned Wrong <input type="checkbox"/>     |  |                       |                                              |  |
| Design <input type="checkbox"/>                              | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                                                                                                                                                   | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Outside Dimensions <input type="checkbox"/>   |  |                       |                                              |  |
| Doc/Data <input type="checkbox"/>                            | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>                                                                                                                                     | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Over/Under tolerance <input type="checkbox"/> |  |                       |                                              |  |
| Equip/Tooling <input type="checkbox"/>                       | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                                                                                                                                                    | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Part Incorrect <input type="checkbox"/>       |  |                       |                                              |  |
| Handling/Pre <input type="checkbox"/>                        | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/>                                                                                                                                    | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Part Lost/Missing <input type="checkbox"/>    |  |                       |                                              |  |
| Material <input type="checkbox"/>                            | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                                                                                                                                                     | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Part Moved <input type="checkbox"/>           |  |                       |                                              |  |
| Internal Transport <input type="checkbox"/>                  | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>                                                                                                                                                  | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Drawing <input type="checkbox"/>              |  |                       |                                              |  |
| Tribal Knowledge <input type="checkbox"/>                    | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>                                                                                                                                                | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Finish <input type="checkbox"/>               |  |                       |                                              |  |
| LOA <input type="checkbox"/>                                 | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>                                                                                                                                        | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Misread <input type="checkbox"/>              |  |                       |                                              |  |
| Substation <input type="checkbox"/>                          | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>                                                                                                                                             | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Turning Sequence <input type="checkbox"/>     |  |                       |                                              |  |
| Past Expiry Date <input type="checkbox"/>                    | Manufacturing Process <input type="checkbox"/> |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                              |  |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>              | OTHER :                                                                                                                                                                            |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                              |  |

# Picklist Print

Wednesday, December 14, 2016 1:56:30 PM

Page 1  
1

Work Order ID: 154508

**\*154508\***

Parent Item: D3793-1

**\*D3793-1\***

Parent Item Name: Wearplate Fwd

Start Date: 12/19/2016

Required Date: 12/23/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A 08-05-13 new issue DD verified by:EC  
IPP Rev:B 08-05-23 revA as per dwg DD verified by:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304S20GA                       |                        | Purchased     |             | No                  |                  | 100             | sf                 | 119.3210       | 0.5902      | 7.455158     |               |                |        |

**\*M304S20GA\***

**\*\***

oc 16/12/17

304/316 .040 Sheet

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| MAT020   | 118.5   |          |
| m134495  | 0.2     |          |
| m134982  | 0.1     |          |
| m135327  | 21.6    |          |
| m135689  | 32.6    | 85       |
| m136327  | 64      |          |
| MAT20    | 0.821   |          |
| m133901  | 0.821   |          |



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                          |                                                                                                                                                                                    |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                          |                                                                                                                    |                          |                      |                          |
|--------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|--------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                          | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |                          |                                   |                          |                                                                                                                    |                          |                      |                          |
| Date :                                                       |                          | Step #:                                                                                                                                                                            |                          | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   | MRB (QSI042) Approval    |                                                                                                                    |                          |                      |                          |
| Description Work Order Deviation                             |                          |                                                                                                                                                                                    |                          | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                                   |                          | Completed By<br><br><br>Lead hand / Supervisor<br>Approval Verification<br><br><br>QC / QA Coordinator<br>Approval |                          |                      |                          |
|                                                              |                          |                                                                                                                                                                                    |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                          |                                                                                                                    |                          |                      |                          |
|                                                              |                          |                                                                                                                                                                                    |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                          |                                                                                                                    |                          |                      |                          |
| Root Cause                                                   |                          | FAULT CATEGORY                                                                                                                                                                     |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                          |                                                                                                                    |                          |                      |                          |
| Environment                                                  | <input type="checkbox"/> | No Re-verification                                                                                                                                                                 | <input type="checkbox"/> | Pressure/Forced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> | Temperature/Cure                  | <input type="checkbox"/> | Power Loss/Surge                                                                                                   | <input type="checkbox"/> | Positioned Wrong     | <input type="checkbox"/> |
| Design                                                       | <input type="checkbox"/> | Operator                                                                                                                                                                           | <input type="checkbox"/> | Bending                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> | Set-up                            | <input type="checkbox"/> | Folio/Program                                                                                                      | <input type="checkbox"/> | Outside Dimensions   | <input type="checkbox"/> |
| Doc/Data                                                     | <input type="checkbox"/> | Offset/Setup                                                                                                                                                                       | <input type="checkbox"/> | Centre Not Concentric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> | BOM/Route                         | <input type="checkbox"/> | Grain                                                                                                              | <input type="checkbox"/> | Over/Under tolerance | <input type="checkbox"/> |
| Equip/Tooling                                                | <input type="checkbox"/> | Supplier                                                                                                                                                                           | <input type="checkbox"/> | Cracks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> | Broken/Damage/Defect              | <input type="checkbox"/> | Weld                                                                                                               | <input type="checkbox"/> | Part Incorrect       | <input type="checkbox"/> |
| Handling/Pre                                                 | <input type="checkbox"/> | Training                                                                                                                                                                           | <input type="checkbox"/> | Crimp/Kink/Ripple/Wave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> | Inspection Incomplete/Unqualified | <input type="checkbox"/> | Wrong Stock Pulled                                                                                                 | <input type="checkbox"/> | Part Lost/Missing    | <input type="checkbox"/> |
| Material                                                     | <input type="checkbox"/> | Use for Testing                                                                                                                                                                    | <input type="checkbox"/> | Cuffs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> | Contamination                     | <input type="checkbox"/> | Out of Sequence                                                                                                    | <input type="checkbox"/> | Part Moved           | <input type="checkbox"/> |
| Internal Transport                                           | <input type="checkbox"/> | Poor Information                                                                                                                                                                   | <input type="checkbox"/> | Crushing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> | Countersink                       | <input type="checkbox"/> | Off-set                                                                                                            | <input type="checkbox"/> | Drawing              | <input type="checkbox"/> |
| Tribal Knowledge                                             | <input type="checkbox"/> | Rushing                                                                                                                                                                            | <input type="checkbox"/> | Heat Treat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> | Cut Too Short                     | <input type="checkbox"/> | Mislabeled                                                                                                         | <input type="checkbox"/> | Finish               | <input type="checkbox"/> |
| LOA                                                          | <input type="checkbox"/> | Product Improvement                                                                                                                                                                | <input type="checkbox"/> | Wave/Twist in Tube                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> | Instructions Incomplete/Unclear   | <input type="checkbox"/> | Fit/Function                                                                                                       | <input type="checkbox"/> | Misread              | <input type="checkbox"/> |
| Substation                                                   | <input type="checkbox"/> | Process Improvement                                                                                                                                                                | <input type="checkbox"/> | Marks/Chatter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> | Drill Holes                       | <input type="checkbox"/> | Misaligned/off center                                                                                              | <input type="checkbox"/> | Turning Sequence     | <input type="checkbox"/> |
| Past Expiry Date                                             | <input type="checkbox"/> | Manufacturing Process                                                                                                                                                              | <input type="checkbox"/> | OTHER :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                                   |                          |                                                                                                                    |                          |                      |                          |
| Misidentified                                                | <input type="checkbox"/> | Past Due                                                                                                                                                                           | <input type="checkbox"/> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                          |                                                                                                                    |                          |                      |                          |



|                                            |  |                             |
|--------------------------------------------|--|-----------------------------|
| <b>DART AEROSPACE LTD</b>                  |  | <b>Work Order:</b> 154508   |
| <b>Description:</b> Wearshoe               |  | <b>Part Number:</b> D3793-1 |
| <b>Inspection Dwg:</b> D3793 <b>Rev:</b> A |  | <b>Page 1 of 1</b>          |

### FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**
                         
 ☐ **Prototype**

| Drawing Dimension | Tolerance     | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.188            | +0.005/-0.001 | Ø.187            | 1      |        | V=0.01               |          |
| 0.300 x 0.300     | +/-0.010      | .303 x .305      | 1      |        | V=0.02               |          |
| 1.885             | +/-0.010      | 1.881            | 1      |        | Tape                 |          |
| 2.000             | +/-0.010      | 2.002            | 1      |        |                      |          |
| 5.00              | +/-0.030      | 5.00             | 1      |        |                      |          |
| 8.00              | +/-0.030      | 8.00             | 1      |        |                      |          |
| 14.00             | +/-0.030      | 14.00            | 1      |        |                      |          |
| 20.00             | +/-0.030      | 20.00            | 1      |        |                      |          |
| 14.066            | +/-0.010      | 14.066           | 1      |        |                      |          |
| 18.983            | +/-0.010      | 18.983           | 1      |        |                      |          |
| 23.900            | +/-0.010      | 23.900           | 1      |        |                      |          |
| 27.400            | +/-0.010      | 27.400           | 1      |        |                      |          |
| 29.400            | +/-0.010      | 29.400           | 1      |        |                      |          |
| 32.900            | +/-0.010      | 32.900           | 1      |        |                      |          |
| 0.040             | +/-0.010      | .036             | 1      |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |

|                                                               |                                                               |                                                    |
|---------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------|
| <b>Measured by:</b> <u>ae</u><br><b>Date:</b> <u>16/12/17</u> | <b>Audited by:</b> <u>DAS</u><br><b>Date:</b> <u>16-12-19</u> | <b>Prototype Approval:</b> N/A<br><b>Date:</b> N/A |
|---------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------|

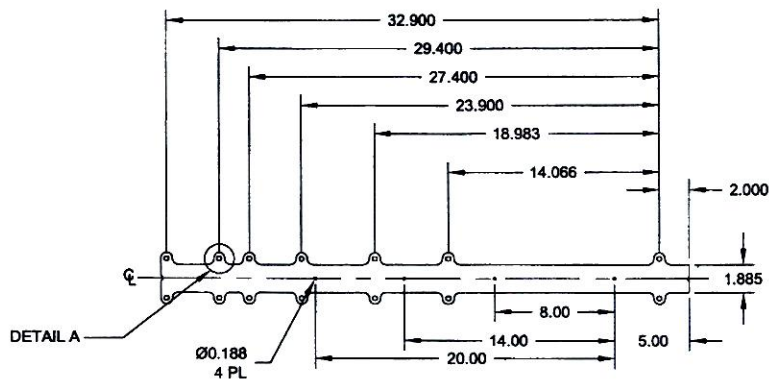
| Rev | Date     | Change    | Revised by               | Approved           |
|-----|----------|-----------|--------------------------|--------------------|
| A   | 08.05.30 | New Issue | KJ/DD <u>[Signature]</u> | <u>[Signature]</u> |

8 7 6 5 4 3 2 1

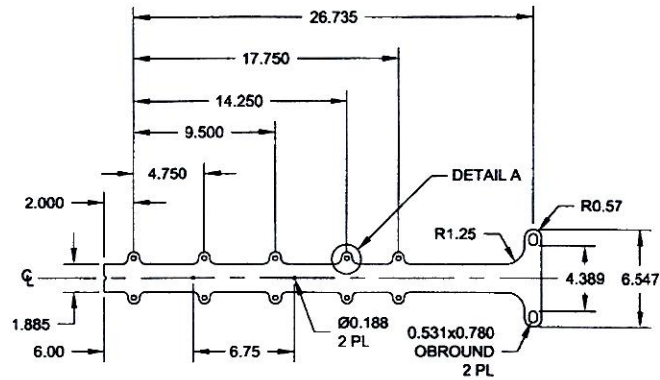
D

C

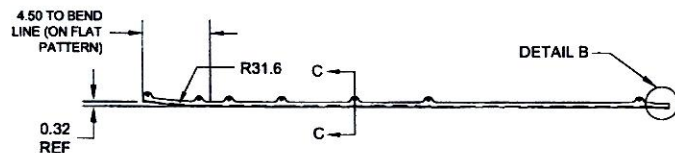
B



**D3793-1F FLAT PATTERN**



**D3793-3F FLAT PATTERN**



**D3793-1 BEND DETAIL**  
(MAKE FROM D3793-1F)



**D3793-3 BEND DETAIL**  
(MAKE FROM D3793-3F)

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)  
(REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "DXXXX-X" ON INSIDE SURFACE USING FINE POINT PERMANENT INK MARKER OR LABEL AFTER FINISH
- 7) WEIGHT: D3793-1 - 0.72 LBS, D3793-3 - 0.66 LBS

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 154508  
16-12-14

**RELEASED**  
08.05.14

| REV.       | DESCRIPTION | PH | DATE     |
|------------|-------------|----|----------|
| A          | NEW ISSUE   | PH | 08.05.14 |
| DESIGN     | PH          |    |          |
| DRAWN      | PH          |    |          |
| CHECKED    |             |    |          |
| MFG. APPR. |             |    |          |
| APPROVED   |             |    |          |
| DE APPR.   |             |    |          |
| DATE       | 08.05.14    |    |          |

**DART AEROSPACE USA, INC**  
PORT HADLOCK, WA  
DRAWING NO. D3793  
TITLE WEARSHOE  
REV. A  
SHEET 1 OF 2  
SCALE NTS

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WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

D

D

C

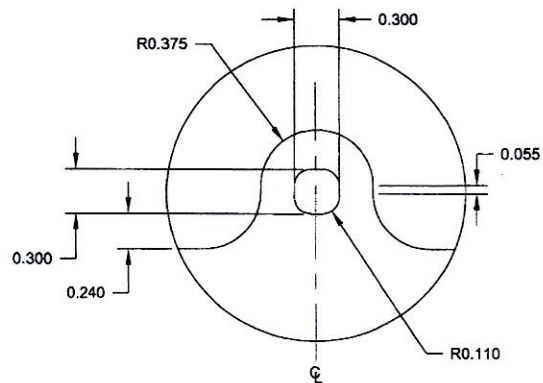
C

B

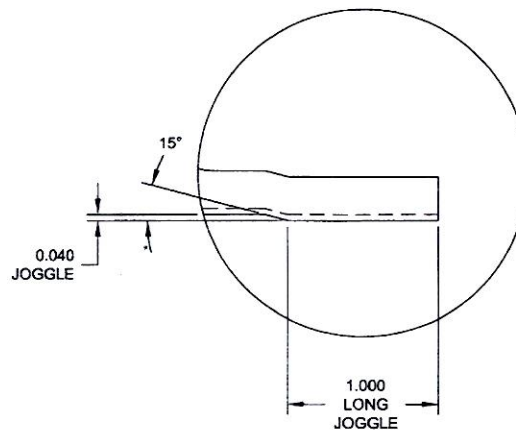
B

A

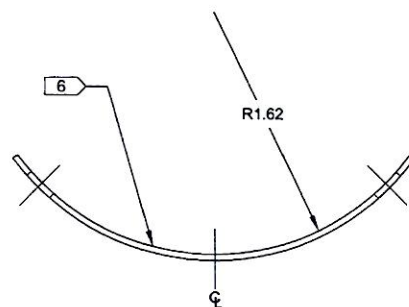
A



**DETAIL A**  
SCALE 10X



**DETAIL B**  
SCALE 10X



**SECTION C-C**  
SCALE 10X

**RELEASED**  
08-05-23/102

|            |          |                                                                                                                                                                                                                                                                                                     |              |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | PH       | <b>DART AEROSPACE USA, INC</b>                                                                                                                                                                                                                                                                      |              |
| DRAWN      | PH       | PORT HADLOCK, WA                                                                                                                                                                                                                                                                                    |              |
| CHECKED    |          | DRAWING NO.                                                                                                                                                                                                                                                                                         | REV. A       |
| MFG. APPR. |          | D3793                                                                                                                                                                                                                                                                                               | SHEET 2 OF 2 |
| APPROVED   |          | TITLE                                                                                                                                                                                                                                                                                               | SCALE        |
| DE APPR.   |          | WEARSHOE                                                                                                                                                                                                                                                                                            | NTS          |
| DATE       | 08.05.14 | <small>COPYRIGHT © 2008 BY DART AEROSPACE USA, INC<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |

8 7 6 5 4 3 2 1